

# **Open Position:**

## Postdoctoral Researcher in Single Molecule Spectroscopy

**Aim:** Develop a single molecule method to map electronic structures of complex biomolecules on surface.

**Fields:** Single molecule imaging, Physical analytical chemistry, Glycoscience.

**Techniques:** Electrospray ion beam deposition (ESIBD), Low temperature scanning tunnelling microscopy (LT STM), Density functional theory (DFT), Nanoelectrospray, Nuclear-electronic structure correlations.

#### We offer:

- 1. A **full-time position** with salary and benefits according to German TVöD, funded by ERC Starting Grant Project GlycoX. Initial appointment is for **one year** with a possibility to extend.
- 2. Access to cutting-edge research infrastructure and supercomputers in the Max Planck Society to support *your* scientific goals.
- 3. Opportunities to collaborate with the Nanoscale Science Department and external groups to furnish *you* with unique interdisciplinary scientific challenges.
- 4. Training in *both* experimental and computational techniques to finesse *your* scientific profile.
- 5. Engaging environment to nourish *your* scientific independence.
- 6. Support to attend workshops and conferences to develop *your* scientific network.
- 7. Mentorship in proposal writing, management, and communication skills to equip *you* with transferable skills.

**Your project:** Develop a single molecule spectroscopy method using LT STM to achieve chemical-sensitive single molecule imaging of glycoconjugate molecules (glycoproteins, glycolipids, etc) soft landed on surface by ESIBD technique; and develop a model based on DFT to interpret the observations.

#### We seek someone who is:

Curious, enthusiastic, team oriented, fluent and articulate in oral and written English, a holder of PhD in Physics, Chemistry, or equivalent. Knowledge/skill in low temperature scanning probe microscopy and spectroscopy, ultrahigh vacuum systems, native electrospray, glycoscience, and/or *ab initio* calculations is advantageous.

### To apply:

Please email Dr. Kelvin Anggara (**k.anggara @fkf.mpg.de**) using the title 'GlycoX\_PDF' and submit as <u>a single PDF</u>: (i) *one-page* motivation letter (explain *in specifics* <u>why</u> this lab and <u>how</u> this position further your career) and (ii) CV (include publication list, research description, and contacts of two referees).

Earliest possible starting date is 1st May, 2023. Review of applications begins immediately and will continue until the position is filled. The Max Planck Society endeavors to achieve gender equality and diversity. We seek to increase the number of women in areas where they are underrepresented and therefore explicitly encourage women to apply. The Max Planck Society is committed to increasing the number of individuals with disabilities in its workforce and therefore encourages applications from individuals with disabilities.







